

**A New Hymenosomatid Crab, *Elamenopsis okinawaensis*, n. sp.
(Crustacea: Hymenosomatidae), from Okinawa, the Ryukyu Islands, Japan¹**

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ABSTRACT: A new species of the Hymenosomatidae (Crustacea, Brachyura), *Elamenopsis okinawaensis* Nakasone & Takeda, n. sp., is described on the basis of two specimens (male and female) from the Aha River, on Okinawa in the Ryukyu Islands. It is easily distinguished from its congeners, *E. octagonalis* (Kemp), *E. hirtirostris* Lucas & Davie, and *E. mangalis* Ng, by the different structure of the male abdomen, the dactyli of the walking legs, and the male first pleopod.

The family Hymenosomatidae has been represented by five genera in Japan: *Halicarcinus*, *Elamena*, *Trigonoplax*, *Rhynchoplax*, and *Neorhynchoplax* (Sakai 1938, 1976, Miyake 1983). Of them, *Rhynchoplax* Stimpson, 1858, and *Neorhynchoplax* Sakai, 1938, were treated as synonyms of *Halicarcinus* White, 1846, and *Elamenopsis* A. Milne Edwards, 1873, respectively, in the excellent review by Lucas (1980). Thus, Japanese hymenosomatid crabs currently are represented by four genera.

Recently, two specimens (male and female) were found during ecological and distributional research on decapod crustaceans from the river mouth to the upper stream in Aha River, in the northern part of Okinawa in the Ryukyu Islands. The collection point was on the left bank about 500 m upstream from the river mouth, becoming tideland at low tide, with muddy coarse sand and pebbles. The male and female specimens were collected together inside a 0.5 by 0.5 m quadrat.

The specimens referred to *Elamenopsis* differ not only from the Japanese species, *E. ariakensis* (Sakai, 1969), but also from all other representatives of the genus. In this paper, we describe them as a new species, *E. okinawaensis*. The specimens are deposited in the National Science Museum, Tokyo (NSMT).

Elamenopsis okinawaensis Nakasone & Takeda, n. sp.

Figure 1

HOLOTYPE: Male (NSMT-Cr 11352), cw (carapace width) 4.1 mm, Aha River, Okinawa, Ryukyu Islands, Y. Nakasone & H. Hayashi, leg., 7 August 1990. **PARATYPE:** One female (NSMT-Cr 11353), cw 3.5 mm, same data as holotype.

DIAGNOSIS: Carapace subcircular, each lateral carapace wall with a forward-directed spine above base of first walking leg. Rostrum with 3 separate triangular lobes; median lobe longest and below lateral ones. Chelipeds not elongate, subequal, with a subterminal tooth on lower margin of merus. Walking legs very long, not laterally compressed; merus with a terminal spine; dactylus slender and curved distally, with one subterminal tooth. Male abdomen with segments 3–5 fused. Male first pleopod slender, with row of setae on sternal side.

DESCRIPTION: Carapace subcircular, surface smooth, with well-marked gastric, cardiac, and branchial regions; cervical and gastrocervical grooves deep; lateral carapace wall with a forward-directed spine above base of first walking leg. Front consisting of 3 separate triangular lobes fringed with short setae, the median one longest and below the lateral two; postocular lobe small and subacute, visible in dorsal view. Basal antennular segment without lateral tooth and strong angle. Third maxilliped with long setae on inner margin of ischium and merus, with plumose setae on their outer margins; exo-

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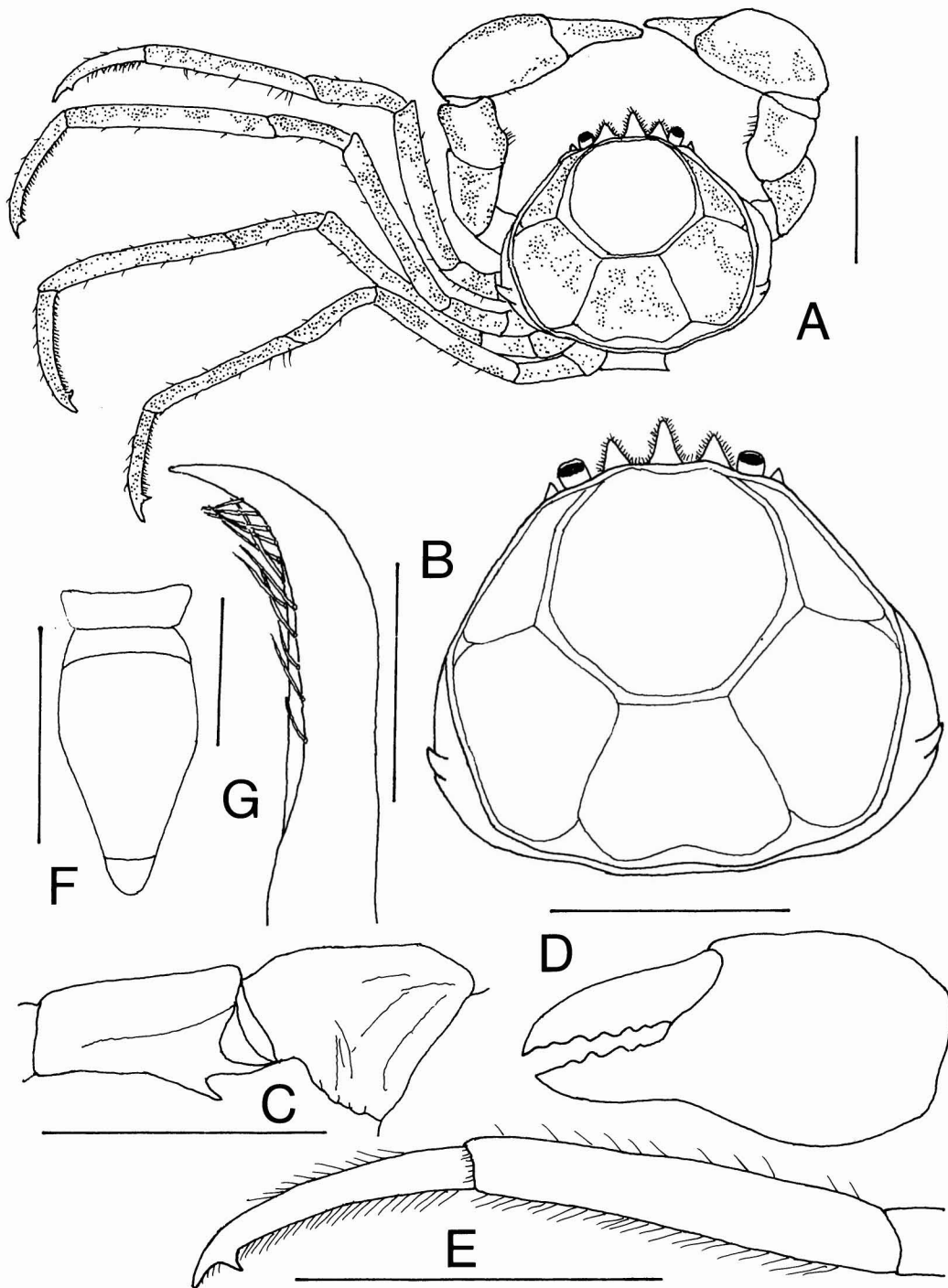


FIGURE 1. *Elamenopsis okinawaensis*, n. sp., holotype male: *A*, dorsal view; *B*, carapace; *C*, cheliped merus and carpus; *D*, left chela; *E*, left first walking leg; *F*, abdomen; *G*, left first pleopod. Scale = 2.0 mm for *A–F*; 0.2 mm for *G*.

gnath slender. Chelipeds not elongated, subequal, and much stouter than walking legs; merus with a subterminal tooth ventrally; propodus smooth, and fingers as long as palm; cutting edges of both fingers with some developed irregular teeth. Female cheliped without a subterminal tooth on ventral margin of merus. Walking legs long and slender, setose; merus with a terminal spine; dactylus curved distally, with only a subterminal tooth, without recurved teeth along ventral margin. Male abdomen with segments 1 and 2 short, segments 3–5 fused without sutures; telson rounded distally, suture between telson and fused segments visible. First pleopod slender, distally curved toward sternum, with row of setae on sternal side distally. Female abdomen with segments 1 and 2 short, segments 3–5 fused, forming major part of abdomen; telson short and broad.

REMARKS: *Elamenopsis okinawaensis*, n. sp. resembles *E. octagonalis* (Kemp, 1917) from India in having similar carapace regions, the presence of a spine on the lateral carapace wall, a subterminal tooth on the lower margin of the chelipedal merus (Lucas 1980:194), and absence of a spinule with a subterminal tooth on the ventral margin of each walking leg dactylus. However, it is distinguished from *E. octagonalis* by lacking short hairs on the carapace, lacking a strong lateral tooth on the basal antennular segment (Lucas 1980:194), and having a different-shaped male first pleopod (Lucas & Davie 1982:404). The new species differs from *E. hirtirostris* Lucas & Davie, 1982, from Queensland in having a different regional pattern of the carapace, a different shape of the male first pleopod, and lacking the spinules on the ventral margins of the walking leg dactyli. The new species is easily distinguished from *E. mangalis* Ng, 1988, from Singapore by the different regional pattern of the carapace, the fusion of male abdominal segments 3–5 (3 and 4 in *E. mangalis* male), and the different shape of the male first pleopod.

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